

RECEIVED  
CENTRAL FAX CENTER

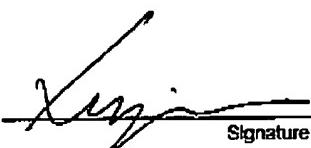
DEC 06 2006

PTO/SB/03 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Doc Code: AP.PRE.REQ

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) <b>TSM03-0763</b>	
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>December 6, 2006</u></p> <p>Signature _____</p> <p>Typed or printed name <u>Judy A. Betts</u></p>		<p>Application Number <b>10/828,884</b></p> <p>First Named Inventor <b>Tseng</b></p> <p>Art Unit <b>2823</b></p>	<p>Filed <b>April 21, 2004</b></p> <p>Examiner <b>Khiem D. Nguyen</b></p>
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>			
<p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. <u>58,322</u> Registration number _____</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>		 <b>Jiayu Xu</b> Type or printed name <b>(972) 732-1001</b> Telephone number <b>December 6, 2006</b> Date	
<p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.</p>			
<p><input checked="" type="checkbox"/> Total of <u>1</u> forms are submitted.</p>			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Tseng	Docket No.:	TSM03-0763
Serial No.:	10/828,884	Art Unit:	2823
Date Filed:	April 21, 2004	Examiner:	Khiem D. Nguyen
Title:	Compensated Linearity Voltage-Control-Capacitor Device by Standard CMOS Process		

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

Claims 1-19 and 31-40 are pending in this application. Applicant appeals the final rejection of claims 1-4, 9, 12, 14, 15, 18, 19, 31-37 and 40, which were rejected as being obvious over the combination of Adan (U.S. Pub. 2003/0136992) in view of Yeo (U.S. Patent 6,521,939 to Yeo et al.).

Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Adan in view of Yeo. Claim 1 relates to forming a varactor and recites "forming first, second and third N+ regions in the same N well." Applicant respectfully submits that the combination with Yeo, as proposed in the final office action and in the Advisory Action, would render Adan unsatisfactory for its intended purpose.

*1. Issue*

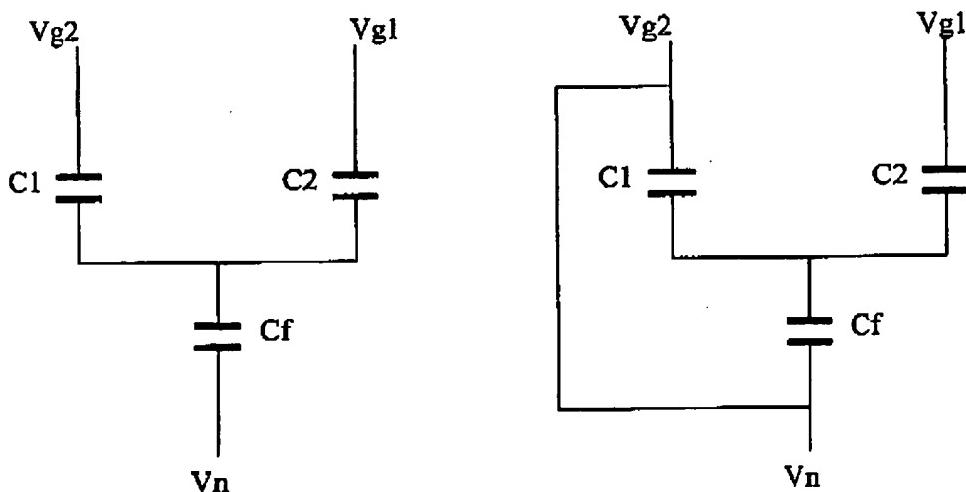
The issue in the application is whether or not it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the forming of Adan varactor

structure to include forming the first 36, second 37 and third 24 N+ doped region of Adan in the same N well in view of Yeo.

## *2. Discussion*

Each pending independent claim recites first, second, and third varactor elements comprising doped regions formed in the same N well. Examiner has conceded that Adan does not teach forming all the N+ doped regions in the same N well. Examiner has asserted that it would have been obvious to combine the teaching of Adan and Yeo to form the first 36, second 37 and third 24 N+ doped regions of Adan (FIG. 5) in the same N well of Yeo.

In response, the Applicant has shown that the proposed modification to Adan is without merit because, by combining Adan and Yeo, and forming the first 36, second 37 and third 24 N+ doped regions in the same N well, it simply shorts control terminal Vg2 and control terminal Vn (FIG. 5) and destroys the intended purpose of Adan as a multi-terminal MOS varactor (page 2, paragraph [0033] and page 3, paragraph [0051]). This is illustrated below:



(This is the schematic of Adan when the doped regions are in separate wells – as taught by Adan)

(This is the resulting schematic if the doped regions of Adan are in the same well as taught by Yeo; note the capacitors C1 and Cf are short-circuited)

In light of the above, the proposed combination in the Final Office Action will render Adan non-operative for its intended purpose and, therefore, does not support a *prima facie* basis of obvious rejection. As stated in the MPEP, "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification (page 2100-131, Rev 2. May 2004)."

Unfortunately, the Advisory Action failed in response to this point and reiterated the rejection in the Final Office Action. Applicant respectfully requests the panel reconsider this argument and the patentability of the claims.

Respectfully submitted,

December 6, 2006



Jiayu Xu  
Agent for Applicant  
Reg. No. 58,322

Slater & Matsil, L.L.P.  
17950 Preston Rd., Suite 1000  
Dallas, Texas 75252-5793  
Tel. 972-732-1001  
Fax: 972-732-9218

TSM03-0763

3

PAGE 7/7 \* RCVD AT 12/6/2006 5:56:35 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-1/17 \* DNN:2738300 \* CSID:9727329218 \* DURATION (mm:ss):02-10